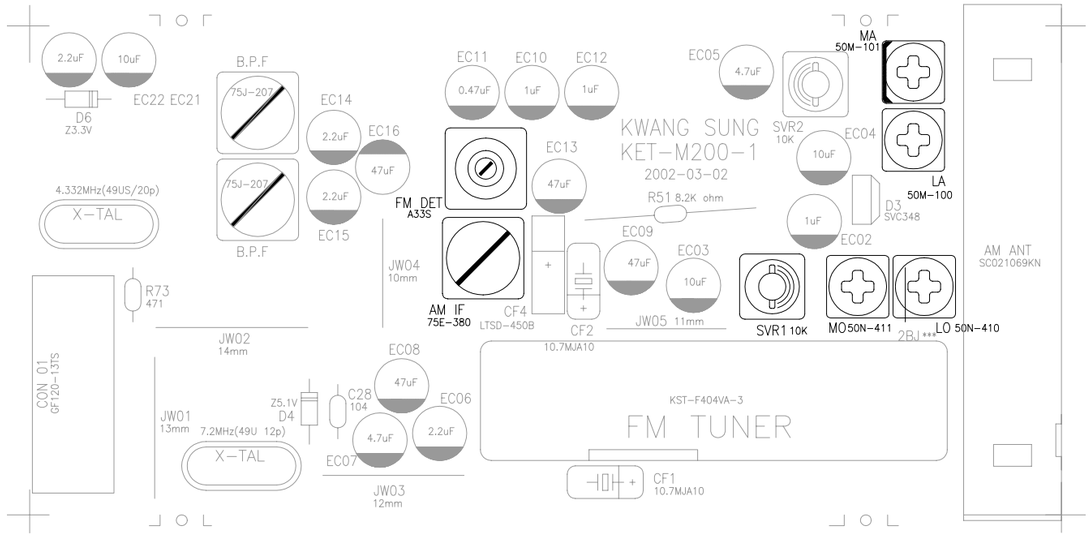
# 1. Alignment and Adjustments

## 1. Tuner




AH40-00026A (KST-MM114LS1-0) TOP VIEW

* Adjustment Location of Tuner PCB

| ITEAM | AM(MW) OSC Adjustment | AM(MW) RF Adjustment | LW OSC Adjustment | AM(MW) RF Adjustment |
|---|---|---|---|---|
| Received FREQ. | 522~1611 KHz | 594 KHz | 146~290 KHz | 150 KHz |
| Adjustment point | MO | MA | LO | LA |
| Output | 1~7.0±0.5V | Maximum Output(Fig1-4) | 2~7.0±0.5V | Maximum Output(Fig1-4) |

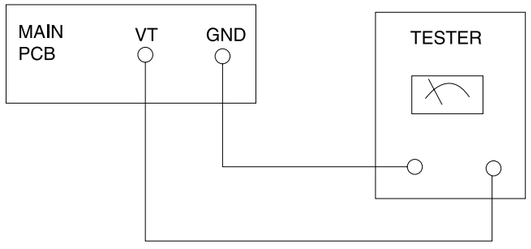



Fig 1-4 OSC Voltage

| FM THD Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (FM DET) | FM DETECTOR COIL |
| Output | 60 dB |
| Minumum Distortion (0.4% below) (Figure 1-1) | |

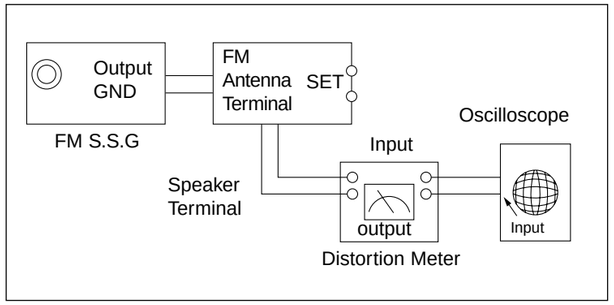



Figure1-1 IF CENTER and THD Adjustment

| FM Search Level Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (SVR1) | BEACON SENSITIVITY SEMI-VR(20KΩ) |
| Output | 28 dB(±2dB) |
| Adjust SVR1 so that “TUNED” of FLT is lighted (Figure 1-2) | |

*Adjust FM S.S.G level to 28dB

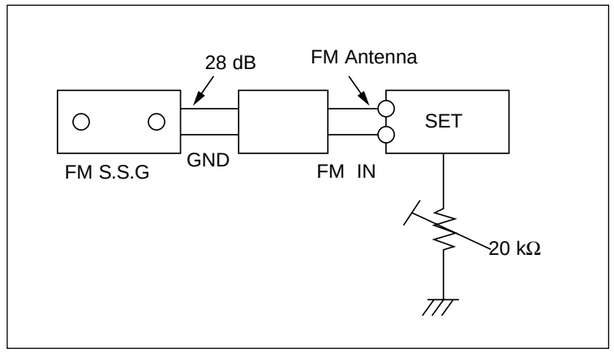



Figure1-2 FM Auto Search Level Adjustment

| AM(MW) I.F Adjustment | |
|---|---|
| SSG FREQ. | 450 kHz |
| Frequency | 522 kHz |
| Adjustment point | AM IF |
| Maximum output (Figure 1-3) | |

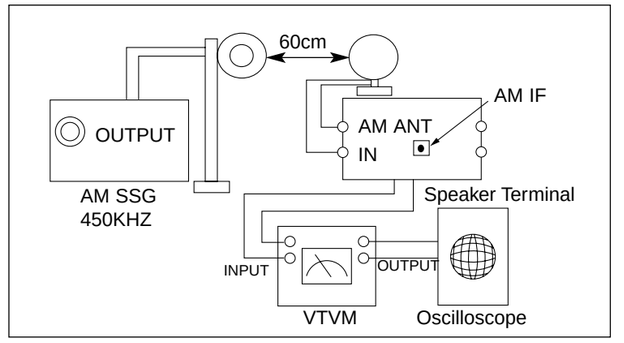



Figure1-3 AM I.F Adjustment

# 2. Cassette Deck

## 2-1. To Adjust Tape Speed

Notes

1) Measuring tape: i) MTT-111 (or equivalent)
(Tapes recorded with 3kHz)
ii) MTT-5512 (or equivalent)
2) Connect the SPK OUT of the MAIN PCB to the frequency counter as in figure 1-5.

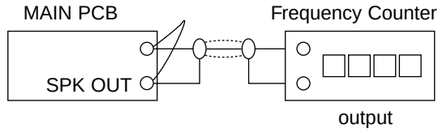



Figure 1-5

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | NOR SPEED Control | SPK OUT (connected to the frequency counter) | 1) Deck :MTT-111<br>2) Press PLAY SW button | CVR1 | 3KHz | ±1% range |

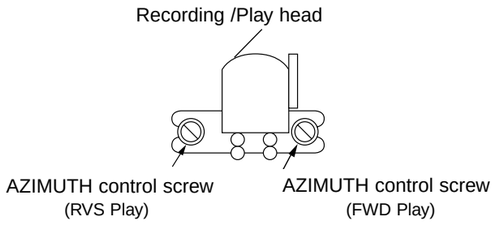



Figure 1-6

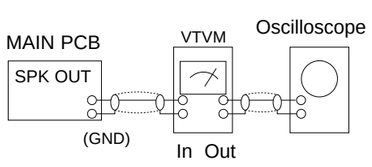



Figure 1-7

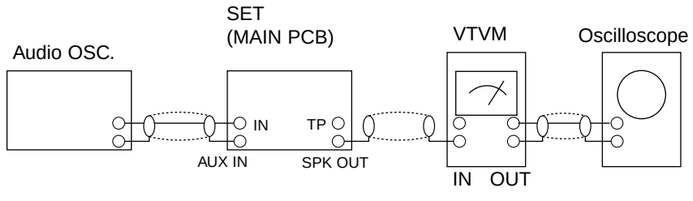



Figure 1-8

## 2-2. To Adjust PlayBack Level/REC

Notes

1) Before the actual adjustment, clean the play/recording head.
2) Measuring tape :
i) MTT-114N(or equivalent 10kHz AZIMUTH control)
ii) MTT-5512
3) The cassette deck is connections as shown in figure 1-7.

### 1. Adjust Deck Play Level

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | AZIMUTH | SPK OUT (VTVM is connected to the scope) | After putting MTT-114N into Deck<br>- Press FWD PLAY button. | - Turn the control screw to as shown in Figure 1-6. | Max output and same phase (both channels) | After adjustment secure it with REGION LOCK. |

### 2. Adjust Deck REC BIAS

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | Recording Bias Frequence | | After putting MTT-5512 into Deck<br>1) Press REC PLAY button.<br>2) TAPE PCB JR1 L/R (by JWA1) ,connected to VTVM | - Turn JT1 to the right and left. | 105KHz | |
| 2 | Recording Bias Voltage | | After putting MTT-5512 into Deck<br>1) Press REC PLAY button.<br>2) TAPE PCB JR1 L/R (by JWA1) ,connected to VTVM | FIXed | CHECK TO 58mV(±10mV) | |